



Certified Access Specialist Program

Staff Report 3.3

QUALIFICATIONS FOR CERTIFICATION

June 30, 2004

EXECUTIVE SUMMARY

In carrying out Senate Bill (SB) 262 (Chapter 873, Statutes of 2003), the State Architect recommends the qualifications for specialist candidates as presented in this report. Research into the formulation of certification qualifications focused on two areas. The first, a catalog of requirements based on existing programs aided the process with examples of current procedures. The second, an inventory of requirements based on relevant employment advertising, was used to establish a standard for prerequisite qualifications. Based on this research, each requirement is matched to pre-established performance expectations. Specialists' duties are thereby coordinated with the competency levels required to complete them.

The resulting proposed qualifications inventory matches the specialist responsibilities established in Staff Report 3.2 to corresponding requirements. Sorted by functional areas of responsibilities with access compliance in the built environment, these requirements demand concrete demonstrations of field proficiency prior to accreditation.

This report follows the recommended access specialist performance expectations presented in Staff Report 3.2 and establishes concrete certification qualifications for each specialist responsibility. Responsibilities and their respective qualifications are grouped according to the three functional areas:

1. Access Design and Survey Specialist
2. Access Plan Review Specialist
3. Access Inspection Specialist

RECOMMENDATION

The State Architect recommends the proposed qualifications and requirements of access specialists for your review and comments. The qualifications and requirements are listed in the attached table and divided into the three specialist classifications of access designer, reviewer, and inspector.

BACKGROUND

Two areas of staff's research complemented the final product of this stage in program development. The first includes qualification requirements in existing programs for access specialists, with supplemental research in related licensing and certification procedures. Studies of existing certification programs identified three relevant examples:

1. International Code Council (ICC) Accessibility Inspector / Plans Examiner certification program
2. Texas Architectural Barriers Registered Accessibility Specialist (RAS) program
3. Minnesota Accessibility Specialist certification program

Supplemental research included California licensing programs for architects, professional engineers, and general building contractors, as well as the DSA certification process of Class Three Project Inspectors. Two national certification programs for similar professions were also reviewed. The findings, detailed in Appendix A, formed the process of defining specific requirement levels for the access specialist functions.

The second area of project research incorporated the requisite levels of education and experience recorded in advertisements for employment as a plans examiner, building inspector, or building official. The examples derived from ICC or California Building Officials (CALBO) provided standards for prerequisite CASp qualifications. They are further described in Appendix B.

Early research into qualifications development shaped the process of designing requirements and methods to fulfill them. Further work focused on adapting the research examples to CASp functional areas to develop certification requirements.

Tables 1 through 4, on the following pages, list one or more qualification requirements for each area of responsibility for specialists, in providing to their clients the accomplishments of:

- Design collaboration and compliance surveys of existing facilities
- Construction documents review
- Construction inspection

Note that the tables correspond to the following three certification classifications:

- Access Design and Survey Specialist
- Access Plan Review Specialist
- Access Inspection Specialist

ANALYSIS

The determination of CASp certification requirements relies heavily on case studies, as numerous programs exist with similar purpose or procedure. For that reason, staff find it appropriate to define specialist requirements similarly to those for related occupations.

Within the specialist program, the three classifications of certification demand different responsibilities and therefore different requirement standards. Consequently, the draft table of certification qualifications defines three series of requirements, according to the anticipated certification classifications. In the attached table, each specialist responsibility, as previously established by Staff Report 3.2, is matched to a detailed requirement.

Based upon the background research, four methods were identified for assessing candidate competency and categorizing certification requirements:

1. *Education*- Verification by official transcript of an academic degree
2. *Instruction*- Verification by official transcript of successful completion of specific coursework
3. *Experience*- Documented work experience for a prescribed employer or in a specific occupation or field
4. *Examination Area*- Demonstrated minimum competency in a specific area of the written examination

Varied levels of competency are expected for each classification area. The lists below summarize the specific requirements itemized in the attached qualifications table:

1. **Access Design and Survey Specialist:** For access specialists who collaborate with design teams as consultants to the architect of record, *proposing* the construction of accessible features.

- a. Required Education: Minimum four-year college degree or equivalent, with a major in architecture or a related field in environmental design; or,
High-school diploma or GED, plus four years of qualifying experience, as prescribed below, in addition to the required experience.
- b. Required Experience: Two years of employment by a licensed architect.
- c. Training: Completion of a State-developed training program.
- d. Examination Areas: Excellence in the Code Examination, and competency in two Classification areas.

2. **Access Plan Review Specialist:** For access specialists who work as plan checkers or plans examiners, *reviewing* the proposed construction of accessible features.

- a. Required Education: Minimum two years college-level coursework in architecture, construction technology, or equal.
Qualifying experience, as stated below, may be substituted on a pro-rata basis for required education, but such employment must be in addition to the required experience.

- b. Required Experience: Three years of employment by a licensed architect, licensed contractor, or code-enforcement agency, of which two years must have involved building permit administration or contract administration.
- c. Training: Completion of State-developed training program
- d. Examination Areas: Competency in the Code Examination, and competency in six Classification areas.

3. Access Inspection Specialist: For access specialists who work as construction inspectors, *verifying* the compliance of completed construction with accessibility requirements.

- a. Required Education: One year of college-level coursework in architecture or construction technology; or, High-school diploma or GED, plus two years of qualifying experience, as prescribed below. Such employment must be in addition to the required experience.
- b. Required Experience: Two years of employment in a building construction trade, a building code enforcement agency, or additional technical architectural coursework.
- c. Training: Completion of State-developed training program.
- d. Examination Areas: Competency in the Code Examination, and competency in one Classification area.

Each classification summary lists the proposed requirements for qualification in the *Examination Areas*. The State Architect recommends that exams for each functional area consist of two parts: (1) a specific body of knowledge or specialty area; and (2) the Common Code area for which all candidates will be responsible, regardless of their intended certification classification.

RECOMMENDATIONS

The State Architect recommends the proposed *qualifications and requirements* of access specialists. The qualifications and requirements are listed in the attached table and divided into the three classification areas identified in Staff Report 3.1, which are:

- Access Design and Survey Specialist
- Access Plan Review Specialist
- Access Inspection Specialist

Table 1:

Certification Qualifications for Design Collaboration and Compliance Surveys of Existing Facilities

Area of Responsibility	Expected Duties	Type of Qualification	Requirement
Effectively Contribute as Design Team Member	<p>Advocate principles of universal design.</p> <p>Fairly characterize the impact of universal design recommendations on other aspects of design.</p>	Education and Experience	<p>Four-year degree in architecture or related major field in environmental design; or,</p> <p>High-school diploma or GED, plus four years of qualifying experience employed by a licensed architect, in addition to the Required Experience and</p> <p>Minimum of two years employment by a licensed architect.</p>
Consult on Design Issues concerning Accessibility Requirements	<p>Advise on the scope of applicable accessibility requirements for a project.</p> <p>Advise on the identification of the jurisdictions responsible for plan review and approval.</p> <p>For new construction, advise on the impact of the operation of programmed space use on compliance with requirements for accessibility and usability.</p> <p>For existing facilities, advise on corrective action required to comply with accessibility and usability requirements.</p> <p>For existing facilities, advise on prioritized implementation of corrective construction.</p>	Examination Classification Area	Correctly answer the minimum required percentage of examination questions in this area.
Verify the Detailing of Accessible Elements	Verify that the representation of each accessible element in the construction documents includes all dimensions, notes and specifications necessary to demonstrate compliance with accessibility requirements.	Code Examination	Demonstrated excellence in answering examination questions on applicable chapters of the California Building Code and other state references.
Coordinate Accessible Elements within the Construction Documents	<p>Coordinate proposed construction of accessible elements into the design of all affected building systems.</p> <p>Review and comment on all applicable drawings before construction documents are submitted for plan review and approval.</p>	Examination Classification Area	Correctly answer the minimum required percentage of examination questions in this area.

Area of Responsibility	Expected Duties	Type of Qualification	Requirement
Understand the Survey Scope	Obtain from the client a complete description of the areas and functions of the facility to survey.	Education	Two years of college-level coursework in architecture or related field in environmental design.
Observe and Record Field Conditions	Examine all areas and functions of the facility that are subject to the survey.	Education	Four-year degree in architecture or related major field in environmental design; or, High-school diploma or GED, plus four years experience employed by a licensed architect, in addition to the Required Experience
	Thoroughly consider all applicable access requirements at each area or function observed.	Code Examination	Demonstrated excellence in answering examination questions on applicable chapters of the California Building Code and other state references.
	Effectively record and/or describe each deficiency encountered.	Technical Writing Competency	One college-level course in technical writing, business communications, or other approved course of instruction.
Properly Complete the Survey Documents	Utilize standard or recommended survey forms, or provide explanation to client for not using such forms. Respond to every applicable item listed on the survey form.	Examination Classification Area	Correctly answer the minimum required percentage of examination questions in this area.
Prepare Final Report to Client	Provide professional opinion on the degree of the facility's compliance with accessibility requirements. Characterize the types of deficiencies identified in the survey.	Technical Writing Competency	One college-level course in technical writing, business communications, or other approved course of instruction.
	Inform the client of its legal responsibilities for addressing survey findings. Forward completed report in conformance with legal deadlines, or within timeframe imposed by lease negotiations or other known constraints.	Examination Classification Area	Correctly answer the minimum required percentage of examination questions in this area.

Table 2:

Certification Qualifications for Construction Documents Review

Area of Responsibility	Expected Duties	Type of Qualification	Requirement
Review Proposed Project Scope for Accessibility Requirements	<p>Verify that the contents of the project application do not conflict with project information shown in the construction documents.</p> <p>Verify that the construction documents are complete, insofar as addressing all applicable accessibility requirements for the project.</p>	Examination Classification Area	Correctly answer the minimum required percentage of examination questions in this area.
General Review of Accessible Elements	Verify that the proposed construction of each accessible element demonstrates compliance with applicable access requirements, by communicating sufficient dimensioning, annotation, specifications and coordination with all applicable drawings.	Code Examination	Correctly answer the minimum required percentage of examination questions on applicable chapters of the California Building Code and other state references.
Review Elements involving Finish Grade Changes	Analyze vertical elevation data shown in topographic and civil engineering drawings, in order to correctly review proposed slopes and other changes in finish grades of accessible elements.	Examination Classification Area	Correctly answer the minimum required percentage of examination questions in this area.
Review Project Specifications	<p>Review individual specification sections for technical content and accuracy.</p> <p>Verify that specifications do not contradict information shown on construction drawings.</p>	Examination Classification Area	Correctly answer the minimum required percentage of examination questions in this area.
Comment on Deficiencies of Accessible Elements	<p>Provide clear plan review comments that accurately describe deficiencies in proposed construction, with markings on the construction documents reviewed.</p> <p>For each deficiency identified, provide citation(s) of code requirements.</p>	Experience	Minimum of two years of qualifying employment, with work in building permit administration or contract administration.
Administrative process for revising Approved Construction Documents	Correctly process proposed revisions to previously-approved construction documents, including incremental approvals, deferred approvals, issued addenda and proposed change orders.	Experience	Minimum of two years of qualifying employment, with work in building permit administration or contract administration.

Table 3:
Certification Qualifications for Construction Inspection

Area of Responsibility	Expected Duties	Type of Qualification	Requirement
Comprehend Approved Construction Documents	Fully understand the construction of accessible elements, as shown in the approved construction documents.	Education or Experience	One year of college-level coursework in architecture or construction technology; or, Qualifying substitute experience, on a pro-rata basis.
	Inform the design professional of record of any errors or omissions encountered, or for any clarifications needed.	Experience	One year of employment in a building construction trade, building code enforcement agency, or additional technical architectural coursework, which involved building permit administration or contract administration.
General Inspection of Accessible Elements	Verify that the construction of an accessible element complies with all applicable accessibility requirements. Inform the design professional of record of deficiencies in the approved construction documents, as encountered during inspection.	Code Examination	Correctly answer the minimum required percentage of examination questions on applicable chapters of the California Building Code and other state references.
Project Recordkeeping	Maintain all forms of inspection records for accessible elements of the project.	Education	High school diploma or General Education Degree (GED).
Prepare Periodic Inspector Reports	Prepare and distribute field reports at project mobilization and closeout, and periodically as required by the enforcement agency with jurisdiction.	Technical Writing Competency	One college-level course in technical writing, business communications, or other approved course of instruction.
Administrative process to resolve Deviations in Construction	Properly apply administrative procedure of enforcement agency to report deviations encountered. Monitor process to review and approve proposed corrective work, as well as the processing of change orders to implement corrective work.	Examination Classification Area	Correctly answer the minimum required percentage of examination questions in this area.

Appendix A

Research into the Required Qualifications of Related Programs

This research identified qualification requirements of existing programs for access specialists, and additional investigations into related licensing and certification programs.

The three existing access specialist programs studied were the International Code Council's (ICC) Accessibility Inspector / Plans Examiner certification program, the Texas Architectural Barriers Registered Accessibility Specialist (RAS) program, and Accessibility Specialist certification program for the state of Minnesota.

Additional qualifications research included:

- licensing programs in California for architects, professional engineers and general building contractors;
- certification process used by the California Division of the State Architect (DSA) for Class 3 Project Inspectors
- two certification programs for similar occupations, whose programs are similar to the CASp program in size and scope

The table on the following page contains research findings relevant to this staff report. Not shown in the table are a number of questions on program characteristics, which proved irrelevant since none of the programs studied had stated requirements for:

- Minimum age requirements or age restrictions.
- Citizenship or residency requirements.
- Whether candidates had to be nominated or otherwise sponsored.
- Required letter(s) of recommendation.

Every program studied required candidates to pass a written examination. Only one program, for licensing as an architect, required an oral examination of candidates.

Two qualifications tables follow. Table A1 is restricted to qualification requirements of existing certification programs for access specialists. Table A2 groups together the qualification requirements for certification, registration or licensure in fields related to the professional work of access specialists.

Table A1:
Qualification Requirements for Certification by Existing Accessibility Specialist Programs

Regulatory Program	Certification Title	Required Training	Required Education	Required Experience
International Code Council (ICC)	Certified Accessibility Inspector / Plans Examiner	None stated.	None stated.	None stated.
Texas Architectural Barriers Program	Registered Accessibility Specialist, with Plan Review Endorsement	Texas Accessibility Academy	Four-year degree in architecture, landscape architecture or interior design, and One year of experience in building planning or accessibility design. OR Eight years of building planning experience OR ICC Certification as a Plans Examiner and Four years of building planning experience.	
Texas Architectural Barriers Program	Registered Accessibility Specialist, with Construction Inspection Endorsement	None stated.	High school diploma or equivalent	Four years of experience related to building or accessibility inspections. OR ICC Certification as Accessibility Inspector and Two years of building or accessibility inspection experience.
State of Minnesota	Certified Accessibility Specialist	Course of instruction by State Building Official	Point qualification system, with points awarded for four-year college degree in architecture or engineering, and two-year college degrees, postsecondary coursework, certification as a building code professional, and qualifying work experience.	

Table A2:

Qualification Requirements for Certification, Registration or Licensure by Related Programs

Regulatory Program	License, Registration or Certification	Required Training	Required Education	Required Experience
California Division of the State Architect (DSA)	DSA Certification as a Class 3 Project Inspector	None stated.	California licensed architect or professional engineer OR Four year college degree in architecture or engineering OR ICC or American Construction Inspectors Association certification as a building inspector	Thirty-six months of qualifying experience in the classification of construction for which certification is sought.
California Contractors License Board	Licensed General Building Contractor (B1)	None stated.	Four years of employment by a licensed contractor, for which partial substitution is granted for qualifying college coursework, post-secondary technical training and apprenticeship programs.	
California Architects Board	Licensed Architect	None stated.	Specific combinations of college degrees in architecture and employment by a licensed architect, totaling eight years.	
California Board for Professional Engineers	Registered Civil Engineer	Engineer-in-Training Program	Specific combinations of college degrees in engineering and employment by a registered civil engineer, totaling no more than five years, and one additional year of employment by a registered civil engineer.	
Institute of Professional Environmental Practice	Certification as a Qualified Environmental Professional	None stated.	Four-year college degree.	Five years of professional environmental work experience.
Board of Certified Safety Professionals	Certified Construction Health and Safety Technician	None stated.	Four-year college degree.	Four years of experience for a professional safety practice.

Appendix B

Qualifications Listed in Employment Advertising for Similar Occupations

This research revisited the pool of employment advertising for building code professionals, which was first studied during the development of performance expectations. These findings may be found in the CASp issue paper on performance standards.

The purpose for taking a second look at this collection is to now find specific requirements for employment, as stated within the advertisements. Staff subsequently used the collective findings for each occupation as representative of an approximate upper limit, in deliberating the qualification requirements for each respective specialist classification.

The following table lists the education and experience requirements for twenty-three advertisements for employment as a building official, plans examiner or building inspector. Also included are the certification requirements for each position advertised. It is noteworthy that some type of certification as a building code professional is required for every advertisement found in our search.

Table B1:

Qualification Requirements for Employment as a Building Code Professional

Position	Certification	Education	Experience
Chief Building Official	CALBO Building Official	BS Engineering or related field	3-5 yrs
Chief Building Official	ICC Building Official	BS Engineering, Construction Management or related field	5 yrs
Deputy Building Official	ICC Building Official	AB Architecture, BS Engineering or related field	4 yrs
Combination Plans Examiner and Building Inspector	ICC Plans Examiner or Building Inspector	None stated	3 yrs Gov Agency or Trade plus 2 yrs Plans Examiner
Structural Plans Examiner	ICC Plans Examiner	Licensed Civil or Structural Engineer	5 yrs
Senior Plans Examiner	ICC Plans Examiner	"completion of college coursework or technical certification" in architecture, engineering, building technology or related field"	5 yrs
Plans Examiner	ICC Plans Examiner	None stated	5 yrs
Plans Reviewer	ICC Plans Examiner	AB Architecture	3 yrs
Plans Examiner	ICC Plans Examiner	"educational background" in architecture, engineering or construction	3 yrs
Assistant Engineer, Building and Safety	ICC Plans Examiner	BS Civil Engineering, or equivalent experience	2 yrs
Plans Examiner	ICC Plans Examiner	None stated	2 yrs.
Plans Examiner	ICC Plans Examiner	None stated	"experience in a building department setting"
Supervising	ICC Combo	None stated	7 yrs

Position	Certification	Education	Experience
Inspector	Inspector		
Senior Inspector	Special Examination	One year trade school in engineering or inspection technology	4 yrs
Senior Inspector	ICC Building Inspector	High School Diploma	3 yrs
Building Inspector	ICC Building Inspector	None stated	3 yrs
Building Inspector	ICC Building Inspector	None stated	3 yrs
Building Inspector	ICC Building Inspector	None stated	2-5 yrs
Building Inspector	ICC Building Inspector	None stated	2 yrs
Building Inspector	ICC Building Inspector	None stated	2 yrs
Entry Level Building Inspector	ICC Building Inspector	None stated	2 yrs journey-level construction
Entry Level Building Inspector	ICC Building Inspector	High School Diploma	1 yr for code enforcement agency, or 3 yrs journey-level construction
Entry Level Building Inspector	ICC Building Inspector	“...education and experience in construction and building inspection field...”	